

# **AUTHORITY TO CONSTRUCT APPLICATION**

Schnitzer Steel Industries > Oakland, CA > Plant No. 208



# Bay Area Air Quality Management District

Prepared By:

### TRINITY CONSULTANTS

1901 Harrison Street, Suite 1590 Oakland, CA 94612 (510) 285-6351

July 2019

Project 190502.0030



Environmental solutions delivered uncommonly well

# TABLE OF CONTENTS

1. EXECUTIVE SUMMARY	<b>*</b> ∞*
2. INTRODUCTION	2-1
2.1. Facility Description	<b>2-</b> 1
2.2. Project Description	
3. EMISSION CALCULATIONS	3-1
3.1. Emission Calculation Methodology	3-1
3.2. Summary of Potential Emissions	
4. REGULATORY APPLICABILITY	4, ~ ?
4.1. Federal Regulations	<b>4-</b> 1
4.1.1. Prevention of Significant Deterioration	
4.1.2. New Source Performance Standards	4-3
4.1.3. National Emission Standards for Hazardous Air Pollutants	4-5
4.2. BAAQMD Regulations	<b>4-</b> 3
4.2.1. Regulation 2 – Permits	4-3
4.2.2. Regulation 3 – Fees	4-3
4.2.3. Regulation 6 – Particulate Matter Requirements	4-3
4.2.4. Regulation 7 – Odorous Substances	
4.2.5. Regulation 8 – Organic Compounds	4-3
4.2.6. Regulation 10 – New Source Performance Standards	4-3
4.2.7. Regulation 11 – Hazardous Pollutants	
APPENDIX A: BAAQMD APPLICATION FORMS	A
APPENDIX B: EMISSION CALCULATIONS	E
APPENDIX C: FACILTY MAP/PLOT PLAN	
APPENDIX D: PROCESS FLOW DIAGRAM	

į

### 1. EXECUTIVE SUMMARY

Schnitzer Steel Industries, Inc. (Schnitzer) owns and operates a metal recycling facility in Oakland, California (the Facility), within the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). The Facility currently operates under a Permit to Operate (PTO) most recently amended on March 22, 2019, by BAAQMD under Facility ID #208. Schnitzer applied for a Major Facility Review (MFR) operating permit in October 2018 to address elevated precursor organic compound (POC) emissions that were first discovered upon construction and operation of the shredder enclosure and enhanced abatement system pursuant to an Authority to Construct (ATC) issued for Application Number (A/N) 27762. Schnitzer is now proposing to add two regenerative thermal oxidizer (RTO) control devices and two packed bed scrubbers to the shredder abatement system to reduce POC emissions (the Project). The RTOs will each be followed by a packed bed scrubber designed to achieve 98% control of any acid gas emissions formed in the RTOs. This change will reduce facility emissions below the major source thresholds specified in BAAQMD Rule 2-6-212. As such, Schnitzer is concurrently submitting a Synthetic Minor Operating Permit (SMOP) Application as a separate submittal to BAAQMD.

As facility potential emissions will be decreasing as a result of the Project, Best Available Control Technology (BACT) will not be applicable to the Project. The potential emissions from the Project are presented in Section 3.2 of this application.

In accordance with BAAQMD Rule 2-1-303, Schnitzer has included payment of the filing fee for this ATC application with the submittal of this application. Schnitzer will pay all remaining fees upon receiving an invoice from BAAQMD.

Appendix A of this application contains the required BAAQMD ATC forms, Appendix B provides detailed emission calculations for the Facility, Appendix C contains the facility plot plan, and Appendix D includes a process flow diagram (PFD) for the proposed Project.

### 2.1. FACILITY DESCRIPTION

Schnitzer Steel Industries, Inc. (Schnitzer) owns and operates a scrap metal recovery, shredding, and recycling facility in Oakland, California (the Facility), within the jurisdiction of the BAAQMD. The Facility currently operates under a PTO issued by BAAQMD for Facility ID #208, which was most recently amended on March 22, 2019. Schnitzer separately applied for an MFR operating permit in October 2018; that application is still pending.

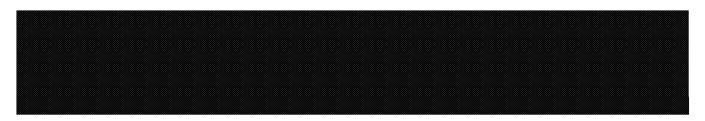
Bulk recyclable material, comprised of heavy iron, auto bodies, appliances, and other light iron, is delivered to the Facility by both rail and truck at the main commercial entrance where it is inspected and sorted. Auto bodies and light iron materials, including appliances and other recyclable light steel materials, are shredded by an electric hammermill (shredder) that is fully enclosed and abated by a particulate control system. Shredded material exiting the hammermill is carried by conveyor under magnetized drums which attract the ferrous materials and separate them from the nonferrous materials. The remaining intermediate non-ferrous stream is known as nonferrous raw (NFR) and consists of both non-ferrous metal and non-metallic materials. The NFR is transferred to the Joint Products Plant (JPP) where non-ferrous metal is further sorted, by metal type, from non-metallic materials. The non-metallic residue from the JPP is stabilized (treated) using a chemical fixation process (including the use of cement from the cement silo) and shipped offsite for use as alternative daily landfill cover.

In addition to bulk scrap metal, recyclable material consisting of non-bulk ferrous/nonferrous metal scrap is also received at the Facility. This material is inspected, weighed, sorted, and segregated by hand into bins by scrap type, and is baled at the non-ferrous recovery building and/or stored in cargo containers for transport by truck offsite.

The Facility is a source of air pollutants including particulate matter (PM), particulate matter less than 10 microns (PM<sub>10</sub>), particulate matter less than 2.5 microns (PM<sub>2.5</sub>), POCs, and hazardous air pollutants (HAPs). The Facility location is designated as non-attainment for ozone and PM<sub>2.5</sub> National Ambient Air Quality Standards (NAAQS).

### 2.2. PROJECT DESCRIPTION

Schnitzer is proposing to add two new regenerative thermal oxidizers (RTOs) to the shredder stack abatement system to control POC emissions and reduce Facility emissions below the major source thresholds specified in BAAQMD Rule 2-6-212, thereby allowing Schnitzer to apply for a SMOP. Currently, the shredder emissions are contained within an enclosure that is controlled by an emission capture and control system consisting of metal ducting, an electric vacuum blower, dropout box, and two Venturi scrubbers (A11 and A12) working in parallel, prior to venting through a stack (P15). The proposed Project will direct the exhaust stream into two RTOs operating in parallel after passing through the Venturi scrubbers. Each RTO will be followed by a packed bed scrubber designed to achieve 98% control of any acid gas emissions that may be formed in the preceding RTO. The exhaust stream will then be vented through two parallel stacks after being processed by the packed bed scrubber.



Schnitzer Steel Industries | Authority to Construct Application Trinity Consultants



Note that Schnitzer has contracted for the detailed engineering design for the proposed RTOs and packed bed scrubbers; final engineering is now underway. Schnitzer has provided details regarding the system that are currently available, and will provide updated information to BAAQMD as soon as it becomes available.

There will be no changes to the existing cement silo as part of the proposed Project, however emission calculations for the cement silo are included in this application to provide a facility-wide emissions estimate.

### 3. EMISSION CALCULATIONS

The following sections describe and summarize the methodologies for calculating emissions associated with the Project. Detailed emission calculations are presented in Appendix B of this report.

### 3.1. EMISSION CALCULATION METHODOLOGY

The Potential-to-Emit (PTE) for stack emissions of POC and  $PM/PM_{10}/PM_{2.5}$  from the shredder was calculated using emission factors based upon source test results submitted to BAAQMD, additional POC control from the RTOs, and an appropriate compliance margin. The fugitive emissions from the shredder were calculated assuming a 95% capture efficiency for the shredder enclosure. The emission factors were used along with the maximum hourly throughput and maximum annual throughput to calculate the PTE. The maximum annual throughput was based on limits contained in the Facility's PTO. No changes are requested to the permitted throughput limits as a part of the Project.

Toxic air contaminant (TAC) emissions were calculated for the shredder by using emission factors based upon compiled source test results submitted to BAAQMD¹ and applying reductions attributable to RTO control where applicable. To quantify the potential acid gas (HCl) emissions from the RTOs, a mass balance approach was used where TACs emitted from the shredder enclosure and controlled by the RTOs that have chlorine atoms were assumed to be completely converted to HCl gas.

While  $NO_x$  emissions from the RTOs are expected to be negligible based upon the design of a similar system being installed at Schnitzer's Massachusetts facility (only a trace amount of  $NO_x$  is formed at the flameless RTO operating temperature), Schnitzer conservatively estimated combustion emissions from the RTOs' natural gas consumption in place of manufacturer guarantees. The POC,  $PM/PM_{10}/PM_{2.5}$ ,  $NO_x$ , CO, and  $SO_2$  PTE for the RTOs was calculated using emission factors from EPA's AP-42 Section 1.4, *Natural Gas Combustion*, Tables 1.4-1 and 1.4-2, and the RTOs' burner heat rating for different operating scenarios, including normal operating capacity and standby capacity.

TAC emission estimates for the shredder were assumed to include the minimal additional TACs that might be formed from the combustion/oxidation of natural gas in the RTOs.

The PM/PM<sub>10</sub>/PM<sub>2.5</sub> PTE for the cement silo was calculated using emission factors from the U.S. Environmental Protection Agency's (EPA) AP-42 Section 11.19.2, *Crushed Stone Processing*, Table 19.2-4 for product storage with fabric filter control.<sup>2</sup> The maximum annual throughput was obtained from the Facility's PTO. Maximum annual emissions were calculated based upon the assumption of 8,760 hours of operation during the year. TAC emissions from the cement silo were calculated using emission factors obtained from the BAAQMD Handbook, Chapter 11.5 for cement silo filling with fabric filter.<sup>3</sup> The cement silo will not be modified or altered as a part of the Project.

<sup>&</sup>lt;sup>1</sup> Compiled source test results compiled and submitted to Carol Allen (BAAQMD) via email from Gary Rubenstein (Foulweather Consulting) on March 29, 2019 and updated on May 7, 2019.

<sup>&</sup>lt;sup>2</sup> Guidance available here: https://www3.epa.gov/ttn/chief/ap42/ch11/final/c11s1902.pdf

<sup>&</sup>lt;sup>3</sup> Guidance available here: http://www.baaqmd.gov/~/media/files/engineering/permit-handbook/baaqmd-permit-handbook.pdf

## 3.2. SUMMARY OF POTENTIAL EMISSIONS

A summary of the potential emissions from the Facility as calculated in Appendix B is provided in Table 3-1, a summary of the estimated TACs from the Facility is provided in Table 3-2 and a summary of the potential emissions from the Project is provided in Table 3-3. Note that overall emissions from the Facility will decrease as a result of the Project.

Table 3-1. Post-Project Facility-Wide Criteria Pollutant PTE

Pollutant	Hourly Emissions	Annual Emissions
	(lb/hr)	(tpy)
POC	19.20	17.42
PM	5.43	5.16
$PM_{10}$	5.41	5.06
PM <sub>2.5</sub>	5.40	5.05
$NO_x$	0.91	2.04
СО	1.52	3.43
$SO_2$	0.01	0.02

Table 3-2. Post-Project Facility-Wide TAC Emissions

Pollutant	HAP?	Hourly Emissions	<b>Annual Emissions</b>
	(Yes/No)	(lb/hr)	(lb/yr)
Acetaldehyde	Yes	6.74E-03	1.21E+01
Arsenic	Yes	1.06E-08	9.29E-05
Benzene	Yes	2.47E-02	4.44E+01
Beryllium	Yes	1.22E-09	1.06E-05
Butadiene, 1,3-	Yes	6.38E-04	1.15E+00
Cadmium	Yes	4.79E-04	5.95E-02
Ethyl Benzene	Yes	5.23E-02	9.41E+01
Hydrogen Chloride	Yes	1.38E-04	2.48E-01
Hexane	Yes	7.57E-02	1.36E+02
Hexavalent Chromium	Yes	2.13E-05	3.84E-02
Isopropyl Alcohol	No	7.57E-03	1.36E+01
Lead	Yes	3.39E-03	6.10E+00
Manganese	Yes	2.93E-07	2.56E-03
Methanol	Yes	1.15E-02	2.07E+01
Methyl Chloroform	Yes	4.01E-03	7.22E+00
Methyl Ethyl Ketone	No	1.13E-02	2.04E+01
Methylene Chloride	Yes	1.83E-03	3.29E+00
Nickel	Yes	1.05E-07	9.15E-04
Perchloroethylene	Yes	2.47E-03	4.45E+00
PCBs	Yes	3.63E-04	6.53E-01
Propylene	No	1.59E-02	2.85E+01
Styrene	Yes	8.15E-03	1.47E+01
Sulfate	No	2.11E+02	1.84E+06
Toluene	Yes	2.12E-01	3.81E+02
Xylenes (mixed)	Yes	1.95E-01	3.51E+02
o-Xylene	Yes	7.19E-02	1.29E+02

Table 3-3. RTO Criteria Pollutant PTE

Pollutant	Maximum Hourly Emissions	Daily Emissions	Annual Emissions
	(lb/hr)	(lb/day)	(tpy)
POC	0.10	1.23	0.22
PM	0.14	1.70	0.31
PM <sub>10</sub>	0.14	1.70	0.31
PM <sub>2.5</sub>	0.14	1.70	0.31
NOx	0.91	11.18	2.04
СО	1.52	18.78	3.43
SO <sub>2</sub>	0.01	0.13	0.02

<sup>1.</sup> This table includes the emissions from the two RTOs and does not reflect emission decreases for control of POC. The RTOs will enable a reduction in POC emissions from the 198 tons per year proposed in the October 2018 MFR application to the 17.42 ton per year level shown in Table 3-1.

<sup>2.</sup> This table summarizes emissions from two equipment units. For BACT determination purposes (which are evaluated on an emission unit by emission unit basis), divide the daily emissions by 2.

### 4. REGULATORY APPLICABILITY

The Facility is subject to various federal and local air quality regulations. This section summarizes the air quality regulations that will apply to the proposed Project. Note that regulations applicable to the existing cement silo are not discussed in this application as there will be no changes to the cement silo as a result of the Project. Specifically, the applicability of Prevention of Significant Deterioration (PSD) permitting requirements, New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAP), and California State Implementation Plan (SIP) regulations are addressed in this section.

### 4.1. FEDERAL REGULATIONS

## 4.1.1. Prevention of Significant Deterioration

PSD applies to new major sources or major modifications at existing sources for pollutants where the area the source is located is in attainment or unclassifiable with the National Ambient Air Quality Standards (NAAQS). PSD is not applicable to this Application since the Project is not considered a PSD Project per BAAQMD Rule 2-2-224 due to the emissions decrease associated with the proposed Project.

### 4.1.2. New Source Performance Standards

New Source Performance Standards (NSPS) have been established in 40 CFR Part 60 and apply to certain types of equipment that are newly constructed, modified, or reconstructed after a given applicability date. NSPS are designed to control emissions to the level achievable by the best-demonstrated technology as specified in the applicable provisions or subparts. No NSPS are applicable to the Facility.

#### 4.1.3. National Emission Standards for Hazardous Air Pollutants

National Emissions Standards for Hazardous Air Pollutants (NESHAPs) are federal regulations that apply to sources of HAPs. NESHAP subparts codified under 40 CFR 61 are pollutant-specific regulations applicable to certain sources of HAPs and NESHAP subparts codified under 40 CFR 63 are source category-specific regulations. No NESHAPs are applicable to the Facility.

## 4.2. BAAQMD REGULATIONS

In addition to the federal air regulations described previously, BAAQMD establishes regulations applicable at the emission unit level and at the facility level. The regulations also contain requirements related to construction and/or operating permits. Potentially applicable regulations for the Project are detailed in the following sections.

## 4.2.1. Regulation 2 - Permits

### 4.2.1.1. Rule 2-1: General Requirements

BAAQMD Rule 2-1-301, *Authority to Construct*, requires facilities to obtain written authorization from BAAQMD prior to constructing any equipment that may reduce or control the emission of air contaminants. The purpose of this application is to apply for and obtain an ATC (and, ultimately, a PTO) as required under BAAQMD Rule 2-1-301 for the Project.

BAAQMD Rule 2-1-310, *Applicability of CEQA*, describes California Environmental Quality Act (CEQA) applicability for various projects. Per BAAQMD Rule 2-1-312, *Other Categories of Exempt Projects*, projects can be exempt from CEQA review if the project falls under a category exempted by the express terms of CEQA or because the project has no potential for causing a significant adverse environmental impact. The Project falls under subsection 2-1-312.2 – permit applications to install air pollution control or abatement equipment. As such, the Project is not subject to CEQA review.

BAAQMD Rule 2-1-412, *Public Notice, Schools,* requires BAAQMD to prepare and distribute a public notice if a new or modified source is within 1,000 feet of the outer boundary of a K-12 school. The Facility is not within 1,000 feet of a K-12 school site and no new or modified sources are a part of this Application; therefore, public notice will not be required.

#### 4.2.1.2. Rule 2-2: New Source Review

BAAQMD Rule 2-2, *New Source Review*, establishes BACT and emission offset requirements for all new and modified sources that are subject to BAAQMD Rule 2-1-301, *Authority to Construct*, and/or Rule 2-1-302, *Permit to Operate*. The addition of the RTOs to the Facility does result in a small increase in combustion emissions; however, the emissions of pollutants from the RTOs do not trigger the BACT threshold of 10 lb/day on a source-by-source basis. As shown in Table 13 of Appendix B, the emissions from each RTO are below the aforementioned BACT threshold. As such, BACT is not required for the addition of the RTOs.

BAAQMD Rules 2-2-302, Offset Requirements, Precursor Organic Compounds and Nitrogen Oxides, and 2-2-303, Offset Requirements  $PM_{2.5}$ ,  $PM_{10}$ , and Sulfur Dioxide, require offsets of emissions from new or modified sources of precursor organic compounds (POC),  $NO_x$ ,  $PM_{2.5}$ ,  $PM_{10}$ , and  $SO_2$ . Offsets are required for emission increases at facilities that have a PTE of more than 10 tons per year of POC or  $NO_x$ , or more than 10 tons per year of  $PM_{2.5}$ ,  $PM_{10}$ , or  $SO_2$ . As seen in Table 3-1, the Facility will have the potential to emit more than 10 tons per year but under 35 ton per year of POC after the Project has been completed. Offsets will be provided as required per these rules.

The Project does not include any other new or modified sources.

### 4.2.1.3. Rule 2-5: New Source Review of Toxic Air Contaminants

BAAQMD Rule 2-5, *New Source Review of Toxic Air Contaminants*, applies to new or modified sources of TACs that are required to obtain an ATC and/or PTO pursuant to BAAQMD Rule 2-1. TAC emission estimates for the shredder are assumed to include the minimal additional TAC emissions that may be formed from the combustion/oxidation of natural gas in the RTOs. Furthermore, the risk from combustion/oxidation of natural gas in the RTOs will be insignificant as compared to the risk associated with the shredder process emissions and overall the toxicity weighted emission reductions from the Project are exempt per the toxicity weighted exemption under Rule 2-5-114. As such, the health risk assessment (HRA) provisions of Rule 2-5 does not apply to the Project.

### 4.2.1.4. Rule 2-6: Major Facility Review

BAAQMD Rule 2-6, *Major Facility Review*, implements permitting requirements of Title V of the Clean Air Act, and is applicable to major facilities and other facilities designated as requiring a Title V permit. Previously in 2018, Schnitzer applied for a MFR permit from BAAQMD, but the purpose of this current ATC application is to qualify for a SMOP by demonstrating that after Project implementation, the Facility emissions will fall below the major source thresholds. As such, BAAQMD Rule 2-6 SMOP requirements will apply to the Facility and are addressed in a separate application submitted concurrently with this one.

### 4.2.2. Regulation 3 - Fees

BAAQMD Regulation 3 specifies fees that must be paid as part of this application. In accordance with BAAQMD Rule 2-1-303, Schnitzer has included payment for the ATC filing fee and will provide payment of all applicable remaining fees upon receiving an invoice from BAAQMD.

### 4.2.3. Regulation 6 - Particulate Matter Requirements

### 4.2.3.1. Rule 6-1: General Requirements

BAAQMD Rule 6-1 Sections 301 and 302 limit the discharge of any air contaminant, other than uncombined water vapor, which is as dark or darker than No. 1 on the Ringelmann Chart (or greater than or equal to 20% opacity) for a period of periods aggregating more than three minutes in any one hour. In addition, Section 305 of this rule specifies that the visible particulate emissions cannot cause annoyance to others if emissions cross property boundaries. However, per Rule 6-1-110.4, metal recycling and shredding operations are exempt from this rule but are subject to Rule 6-4, which is discussed further in this application report.

### 4.2.3.2. Rule 6-4: Metal Recycling and Shredding Operations

BAAQMD Rule 6-4 requires the development of and compliance with Emissions Minimization Plans (EMPs) designed to minimize the fugitive emissions of particulate matter from metal recycling facilities operating within the District. This rule is applicable to a metal recycling facility with a metal throughput of 1000 tons or more per rolling twelve-month period. Condition #26401 of the PTO limits the shredder throughput to 720,000 tons per calendar year, so this rule is applicable to the Facility. Per Section 401, this rule requires the development of, and compliance with, an EMP. Schnitzer's current EMP was submitted and approved by BAAQMD in August 2018, with a recent revision submitted to BAAQMD in June 2019. Schnitzer will continue to operate the Facility in accordance with the EMP.

## 4.2.4. Regulation 7 - Odorous Substances

Regulation 7 places general limitations on odorous substances and specific emission limitations on certain odorous compounds. The limitations of this Regulation are not applicable unless and until the APCO receives odor complaints from ten or more complainants within a 90-day period, alleging that a person has caused odors perceived at or beyond the property line of such person and deemed to be objectionable by the complainants in the normal course of their work, travel or residence. The Facility is subject to the requirements of Regulation 7 although the provisions of the rule have not been triggered.

## 4.2.5. Regulation 8 - Organic Compounds

#### 4.2.5.1. Rule 8-2: Miscellaneous Operations

BAAQMD Rule 8-2 Section 301 requires that a person shall not discharge an emission containing more than 15 pounds per day and containing a concentration of more than 300 parts per million (PPM) total carbon on a dry basis. Schnitzer will comply with all applicable provisions of BAAQMD Rule 8-2 for the Project, including Section 301.

### 4.2.6. Regulation 10 - New Source Performance Standards

BAAQMD Regulation 10 contains a series of rules applicable to new, modified, or reconstructed sources of air pollution. This regulation also incorporates by reference the specific federal NSPS for which enforcement

authority has been delegated to the BAAQMD. As discussed previously in Section 4.1.2, the Facility is not subject to any NSPS.

# 4.2.7. Regulation 11 - Hazardous Pollutants

BAAQMD Regulation 11 contains a series of rules applicable to various source-specific process and emissions units that have the potential to emit specific HAPs. This regulation also incorporates by reference the specific federal NESHAPs for which enforcement authority has been delegated to the BAAQMD. Metal recycling operations are not a source specifically defined in any rule under Regulation 11. As discussed in Section 4.1.3, the Facility is not subject to any NESHAPs.

# APPENDIX A: BAAQMD APPLICATION FORMS



## **BAY AREA AIR QUALITY MANAGEMENT DISTRICT**

375 Beale Street, Suite 600, San Francisco, CA 94105 Engineering Division (415) 749-4990 www.baaqmd.gov fax (415) 749-5030

# Form P-101B Authority to Construct/

Permit to Operate

1. Application Info	rmation				
BAAQMD Plant No.	208	Company Name	Schnitzer Steel	Indust	tries, Inc
Equipment/Project D	Pescription Installing Two	Regenerative Thermal Oxidizer	s and Two Packed Bed Scrubbers to	abate emission	is from the shredder
	If you have not previously supplied to			District or it	f you want to update any plant
Equipment Location	Adeline St,	Foot of (1101	l Embarcadero \	Nest)	
City	Oakland				Zip Code 94607
Mail Address	P.O. Box 7	47			- · -
City	Oakland		State	CA	Zip Code 94604
Plant Contact	Pamela Gr	ay	Title	Regional	Environmental Manager, West
Telephone	(510)839-47	714 Fax (		gray@	schn.com
			w.census.gov/eos/www/i		423930
B. Proximity to a S	-	2001 Oyotomy 500 <u></u>			
<del>-</del>	7	ock one) 🗆 Are 📟	Aro not within 1 000 ft of	the outer	houndary of the pearest school
					boundary of the nearest school.
	vish to designate a dif			iis appiica	tion will be sent to the plant
Application Contact	Pamela Gray		Title	Regiona	al Environmental Manager, West
Mail Address	1101 Embard	adero West			
City	Oakland		State	, CA	Zip Code 94607
Telephone	(510)839-4714	· Fax (		<sub>ail</sub> pgra	y@schn.com
your submittal. Failu	re to provide this infor	mation may delay the		n. Please	ons and should be included with indicate that each item has
If a new Plant, a	ocal street map showi	ng the location of you	r business		
A facility map, dra	wn roughly to scale, t	hat locates the equipr	ment and its emission poi	ints	
Completed data f	orm(s) and a pollutant	flow diagram for each		.baaamd.c	gov/forms/permits)
Project/equipmen	t description, manufac	cturer's data	<b>(</b> <u></u>		,
Discussion and/o	calculations of the er	nissions of air polluta	nts from the equipment		
public record and ma		nird party. If you wish i			n will be considered a matter of pecified in Regulation 2, Rule 1,
Each page contai	ning trade secret infor	mation must be labele	ed "trade secret" with the	trade seci	ret information <u>clearly marked</u> .
A second copy, w	ith trade secret inform	ation blanked out, ma	arked "public copy" must	be provide	ed.
For each item ass	erted to be trade secr	et, you must provide	a statement which provid	es the bas	sis for your claim.

	<ul> <li>You are entitled to a reduced permi you must certify that your business me</li> </ul>		s as defined in
☐ The business does not emplo	y more than 10 persons and its gross a	nnual income does not exceed \$750,	000.
And the business is not an affits gross income exceeds \$75	filiate of a non-small business. (Note: a 60,000.)	non-small business employs more th	an 10 persons and/or
	on You are entitled to a reduced perm you must certify that your business me		ss as defined in
The business has been cert Governments and implements	ified under the Bay Area Green Busines ed by participating counties.	s Program coordinated by the Assoc	iation of Bay Area
A copy of the certification is in	ncluded.		
pollution and abatement equipm	e Accelerated Permitting Program entitl ent <b>without waiting for the District to</b> t will meet <u>all</u> of the following criteria. Pl	issue a Permit to Operate. To part	icipate in this program
Uncontrolled emissions of any BAAQMD.	y single pollutant are each less than 10	b/highest day, or the equipment has	been precertified by the
Emissions of toxic compound	s do not exceed the trigger levels identi	ied in Table 2-5-1 (see Regulation 2,	Rule 5).
The source is not a diesel eng	gine.		
The project is not subject to p source does not emit any toxi	ublic notice requirements (the source is compound in Table 2-5-1).	either more than 1000 ft. from the ne	earest school, <u>or</u> the
For replacement of abatemen pollutants than the equipment	t equipment, the new equipment must he being replaced.	ave an equal or greater overall abate	ement efficiency for all
For alterations of existing sou	rces, for all pollutants the alteration doe	s not result in an increase in emissio	ns.
Payment of applicable fees (tl Engineering Division for help	he minimum permit fee to install and op in determining your fees.	erate each source). See Regulation 3	or contact the
CEQA Please answer the foll	owing questions pertaining to CEQA (C	alifornia Environmental Quality Act).	
Quality Act (CEQA) document (	pared, required preparation of, or issued initial study, negative declaration, envir or another project of which it is a part of	onmental impact report, or other CEC	A document) that
Describe the document or notic	e, preparer, and date of document or ex	spected date of completion:	-
N/A			
List and describe any other pen	mits or agency approvals required for th	is project by city, regional, state or fe	deral agencies:
List and describe all other prior subject of this application could	or current projects for which either of the not be undertaken without the project l		
	that is the subject of this application:		
N/A			
. Certification I hereby certify	that all information contained herein is	true and correct. (Please sign and d	ate this form)
Pamela Gray	Regional Environmental Manager - West	Yand Gron	7/3/2019
Name of person certifying (print)	Title of person certifying	Signature of person certifying	Date
F 34 (F)	BAAQMD Engineering Division, 375	. 9	

(revised 4/12/16)

### BAY AREA AIR QUALITY MANAGEMENT DISTRICT

375 Beale Street, Suite 600. . . San Francisco, CA 94105. . . (415) 749-4990. . . FAX (415) 749-5030 Website: www.baaqmd.gov

## **APPENDIX H**

### **ENVIRONMENTAL INFORMATION FORM**

(To Be Completed By Applicant)

Pamela Gray, PO Box 747, Oakland, CA, 94604  4. Indicate number of the permit application fo Plant # 208	Dakland, CA 94607 mbarcadero West), Oakland, CA 94607 umber: 18-395-1 erson to be contacted concerning this project:
Adeline St, Foot of (1101 Embarcadero West),  2. Address of project: Adeline St, Foot of (1101 E  Assessor's Block and Lot Number: Parcel N  3. Name, address, and telephone number of p Pamela Gray, PO Box 747, Oakland, CA, 94604  4. Indicate number of the permit application fo Plant # 208  5. List and describe any other related permits	Dakland, CA 94607 mbarcadero West), Oakland, CA 94607 umber: 18-395-1 erson to be contacted concerning this project:
<ul> <li>Assessor's Block and Lot Number: Parcel N</li> <li>Name, address, and telephone number of pamela Gray, PO Box 747, Oakland, CA, 94604</li> <li>Indicate number of the permit application fo Plant # 208</li> <li>List and describe any other related permits</li> </ul>	erson to be contacted concerning this project:
<ol> <li>Name, address, and telephone number of p Pamela Gray, PO Box 747, Oakland, CA, 94604</li> <li>Indicate number of the permit application fo Plant # 208</li> <li>List and describe any other related permits</li> </ol>	erson to be contacted concerning this project:
<ul> <li>Pamela Gray, PO Box 747, Oakland, CA, 94604</li> <li>Indicate number of the permit application fo Plant # 208</li> <li>List and describe any other related permits</li> </ul>	
Plant # 208  5. List and describe any other related permits	
5. List and describe any other related permits	the project to which this form pertains:
None.	and other public approvals required for this project, including ederal agencies:
6. Existing zoning district: Heavy Industrial	
7. Proposed use of site (Project for which this	form is filed):
Propose to construct and operate Regenerative	Thermal Oxidizer on Shredder

### **Project Description**

- 8. Site size. Approximately 33 acres
- 9. Square footage. N/A
- 10. Number of floors of construction. N/A
- 11. Amount of off-street parking provided. N/A
- 12. Attach plans. Refer to application report
- 13. Proposed scheduling. Upon ATC issuance
- 14. Associated project. N/A
- 15. Anticipated incremental development. N/A

(revised 4/12/16)

- 16. If residential, include the number of units, schedule of unit sizes, range of sale prices or rents, and type of household size expected. N/A
- 17. If commercial, indicate the type, whether neighborhood, city or regionally oriented, square footage of sales area, and loading facilities. N/A
- 18. If industrial, indicate type, estimated employment per shift, and loading facilities N/A no changes proposed
- If institutional, indicate the major function, estimated employment per shift, estimated occupancy, loading facilities, and community benefits to be derived from the project. N/A
- 20. If the project involves a variance, conditional use or rezoning application, state this and indicate clearly why the application is required.  $_{\rm N/A}$

Are the following items applicable to the project or its effects? Discuss below all items checked yes. Attach additional sheets as necessary.

		Yes	No
21.	Change in existing features of any bays, tidelands, beaches, or hills, or substantial alteration of ground contours.		X
22.	Change in scenic views or vistas from existing residential areas or public lands or roads.		X
23.	Change in pattern, scale or character of general area of project.		X
24.	Significant amounts of solid waste or litter.		X
25.	Change in dust, ash, smoke, fumes or odors in vicinity.		X
26.	Change in ocean, bay, lake, stream or groundwater quality or quantity, or alteration of existing drainage patterns.		X
27.	Substantial change in existing noise or vibration levels in the vicinity.		X
28.	Site on filled land or on slope of 10 percent or more.		X
29.	Use of disposal of potentially hazardous materials, such as toxic substances, flammables or explosives.		X
30.	Substantial change in demand for municipal services (police, fire, water, sewage, etc.).		X
31.	Substantially increase fossil fuel consumption (electricity, oil, natural gas, etc.).		X
32.	Relationship to a larger project or series of projects.		X

## **Environmental Setting**

- 33. Describe the project site as is exists before the project, including information on topography, soil stability, plants and animals, and any cultural, historical or scenic aspects. Describe any existing structures on the site, and the use of the structures. Attach photographs of the site. Snapshots or Polaroid photos will be accepted. See attached pages
- 34. Describe the surrounding properties, including information on plants and animals and any cultural, historical or scenic aspects. Indicate the type of land use (residential, commercial, etc.), intensity of land use (one-family, apartment houses, shops, department stores, etc.), and scale of development (height, frontage, set-back, rear yard, etc.). Attach photographs of the vicinity. Snapshots or Polaroid photos will be accepted. See attached pages

#### Certification

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this initial evaluation to the best of my ability, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

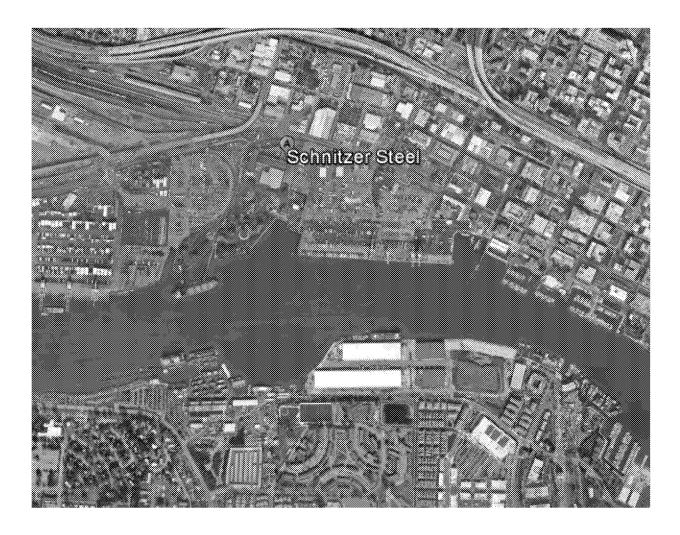
7/3/2019	Yana Gro
Date	Signature
	For Schnitzer Steel Industries, Inc.

(Note: This is only a suggested form. Public agencies are free to devise their own format for initial studies.)

33. The project site includes numerous storage piles and metal shredding equipment. It is located in an inner estuary of Oakland Harbor.



34. The facility is surrounded mostly by other industrial facilities serving Oakland Harbor. To the south of the Facility is Alameda which has residential areas of one to two story, one family houses. To the north, east, and west of the facility, there are other industrial sites. The surrounding areas will not be impacted by the proposed project.



[REDACTED]

# APPENDIX B: EMISSION CALCULATIONS

[REDACTED]

# APPENDIX C: FACILTY MAP/PLOT PLAN

[REDACTED]

APPENDIX D: PROCESS FLOW DIAGRAM

[REDACTED]